

Q2
 executing communication by using at least said IPv6 to said second network executing communications by using said IPv4; detecting that said mobile terminal has moved ^{from} said first network to said second network, based on information included in said first IPv4 message;

acquiring a first IPv4 address to be used on said second network; and

transmitting a second IPv4 message for requesting registration of said first IPv4 address to a first movement assistance apparatus connected to said first network.

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 21. (New) The communication method according to claim 1, 20,

wherein, in said receiving step, said first IPv4 message is transmitted from a second movement assistance apparatus connected to said second network.

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 22. (New) The communication method according to claim 1, 20, further comprising the steps of:

creating an IPv6 message for requesting registration of said first IPv4 address to said first movement assistance apparatus; and

creating said second IPv4 message by encapsulating said IPv6 message into an IPv4 message.

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~~22.~~ 23. (New) The communication method according to claim

wherein said IPv6 message includes an IPv6 address of said mobile terminal and said first IPv4 address.

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24. (New) The communication method according to claim 20, further comprising the steps of:

creating an IPv6 message for notifying said first movement assistance apparatus of said first IPv4 address; and

creating said second IPv4 message by adding an IPv4 header to said IPv6 message, said IPv4 header including a second IPv4 address of said first movement assistance apparatus as a destination address and said first IPv4 address as a source address.

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25. (New) The communication method according to claim 20, further comprising the step of:

receiving a third IPv4 message including said first IPv4 address as a destination address, said third IPv4 message being a response message to said second IPv4 message.

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26. (New) The communication method according to claim 28,

wherein, in said third IPv4 message receiving step, said third IPv4 message is created by adding an IPv4 header to

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 an IPv6 message for responding to said second IPv4 message, said IPv4 header including said first IPv4 address as a destination address and a second IPv4 address of said first movement assistance apparatus as a source address.

§ 23
 1 (27) (New) The communication method according to claim 20, further comprising the step of:

receiving a third IPv4 message for notifying said mobile terminal that said first IPv4 address is registered, said third IPv4 message being transmitted from said first movement assistance apparatus.

§ 24
 27. (28) (New) The communication method according to claim

wherein, in said third IPv4 message receiving step, said third IPv4 message is created by capsulizing into an IPv4 message an IPv6 message for notifying said mobile terminal that said first IPv4 address is registered, said third IPv4 message including said first IPv4 address as a destination address.

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 9 29. (New) The communication method according to claim 28, further comprising the step of:

decapsulizing said received third IPv4 message into said IPv6 message.

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1 ~~30~~. (New) The communication method according to claim
~~20~~, further comprising the steps of:

receiving a first IPv6 message from a second
movement assistance apparatus connected to a third network,
when said mobile terminal has moved from said first network to
a third network executing communications by using at least an
IPv6;

detecting that said mobile terminal has moved to
said third network from said first network, based on
information included in said first IPv6 message;

acquiring a first IPv6 address to be used on said
third network; and

transmitting a second IPv6 message for requesting
registration of said first IPv6 address to said first movement
assistance apparatus.

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11 ~~31~~. (New) The communication method according to claim
~~30~~, further comprising the step of:

receiving a third IPv6 message transmitted from said
first movement assistance apparatus according to said second
IPv6 message, said third IPv6 message including said first
IPv6 address as a destination address.

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32. (New) The communication method according to claim
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20, further comprising the step of:

receiving a third IPv4 message or a first IPv6
message from a second movement assistance apparatus connected
to a third network, when said mobile terminal has moved from
said first network to said third network executing
communications by using said IPv6 and said IPv4;

detecting that said mobile terminal has moved to
said third network from said first network, based on
information included in said received message;

acquiring a first IPv6 address to be used on said
third network; and

transmitting a second IPv6 message for requesting
registration of said first IPv6 address to said first movement
assistance apparatus.

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33. (New) The communication method according to claim
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20, further comprising the steps of:

receiving a first IPv6 message from said first
movement assistance apparatus, when said mobile terminal has
moved to said first network from said second network;

detecting that said mobile terminal has moved to
said first network from said second network, based on
information included in said first IPv6 message; and

transmitting a second IPv6 message for requesting registration of an IPv6 address of said mobile terminal to said first movement assistance apparatus.

a2 15 2 34. (New) The communication method according to claim 21, further comprising the steps of:

in said first IPv4 message receiving step,
transmitting a third IPv4 message for requesting transmission of said first IPv4 message to said second movement assistance apparatus; and

receiving said first IPv4 message transmitted from said second movement assistance apparatus in response to said third IPv4 message.

16 29 25. (New) A communication method by a mobile terminal moving between networks, comprising the steps of:

receiving a first IPv4 message from a second movement assistance apparatus, when said mobile terminal has moved from a first network executing communications by using at least an IPv6 to said second network executing communications by using an IPv4;

detecting that said mobile terminal has moved to said second network from said first network, based on information included in said first IPv4 message;

acquiring a first IPv4 address on said second network; and

transmitting a second IPv4 message for requesting registration of said first IPv4 address to a first movement assistance apparatus connected to said first network.

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36. 40 (New) A communication method executed by a mobile terminal moving between networks, comprising the steps of:

receiving a first message on a second network, when said mobile terminal has moved from a first network executing communications by using at least an IPv6 to said second network;

detecting that said mobile terminal has moved to said second network from said first network, based on information included in said first message;

acquiring a first IP address to be used on said second network;

creating a first IPv6 message for requesting registration of said first IP address to a first movement assistance apparatus connected to said first network;

creating a second message by capsulizing said first IPv6 message into a first IPv4 message, if said second network executes communications by said IPv4; and

transmitting said second message to said first movement assistance apparatus.

17 ¹⁸ 37. (New) The communication method according to claim ~~36~~, further comprising the step of:

a2 transmitting said first IPv6 message to said first movement assistance apparatus, if said second network executes communications by using said IPv6.

17 ¹⁹ 38. (New) The communication method according to claim ~~36~~, wherein, in said first message receiving step, said first message is transmitted from a second movement assistance apparatus connected to said second network.

17 ²⁰ 39. (New) The communication method according to claim ~~36~~, wherein, in said capsulizing step, said second message is created by adding an IPv4 header to said first IPv6 message, said IPv4 header including an IPv4 address of said first movement assistance apparatus as a destination address and said first IP address as a source address.

17 ²¹ 40. (New) The communication method according to claim ~~36~~, further comprising the step of:

receiving a third message transmitted from said first movement assistance apparatus according to said second message.

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21 41. (New) The communication method according to claim 40, wherein, in said third message receiving step, said third message is created by capsulizing a second IPv6 message into a second IPv4 message.

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22 42. (New) The communication method according to claim 41, further comprising the step of:

decapsulizing said received third message into said second IPv6 message.

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43. (New) A communication method executed by a mobile terminal moving between networks, comprising the steps of:

receiving a message on a second network, when said mobile terminal has moved from a first network executing communications by using at least an IPv6 to said second network;

detecting that said mobile terminal has moved to said second network from said first network, based on information included in said message;

acquiring an IPv6 address to be used on said second network, if said second network executes communications by using said IPv6;

creating an IPv6 message for requesting registration of said IPv6 address to a movement assistance apparatus connected to said first network; and

transmitting said IPv6 message to said movement assistance apparatus.

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44. (New) An address registration method by a mobile terminal existing on a first network executing communications by using at least an IPv6, said mobile terminal executing communications by using said IPv6 and an IPv4, comprising the steps of:

receiving a first message from an arbitrary apparatus connected to a second network, when said mobile terminal has moved from said first network to said second network;

detecting that said mobile terminal has moved to said second network from said first network, based on information included in said first message;

→ acquiring an IP address on said second network;
creating a first IPv6 message for requesting registration of said IP address to a movement assistance apparatus connected to said first network and holding movement information of said mobile terminal;

creating a second message by capsulizing said first IPv6 message into a first IPv4 message including an IPv4 address of said movement assistance apparatus as a destination address, when said second network executes communications by using said IPv4; and

transmitting said second message.

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45. (New) The address registration method according to claim 44, further comprising the steps of:

receiving a third message by capsulizing a second IPv6 message transmitted from said movement assistance apparatus into a second IPv4 message including an IPv4 address of said movement assistance apparatus, said second IPv6 message being a message for notifying said mobile terminal that said IP address is registered; and

extracting said second IPv6 message by decapsulizing said third message.

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46. (New) The address registration method according to claim 44, wherein said first IPv6 message is transmitted to said movement assistance apparatus, if said second network, executes communications by using said IPv6.

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47. (New) An address registration method by a mobile terminal existing on a first network executing communications by using at least an IPv6, said mobile terminal being movable to another network, comprising the steps of:

receiving a first IPv4 message from an arbitrary apparatus connected to a second network, when said mobile

terminal has moved from said first network to said second network executing communications by using an IPv4;

detecting that said mobile terminal has moved to said second network from said first network, based on information included in said first IPv4 message;

acquiring an IPv4 address to be used on said second network;

creating an IPv6 message for requesting registration of said IPv4 address to a movement assistance apparatus connected to said first network and holding movement information of said mobile terminal;


creating an IPv4 message by capsulizing said IPv6 message into an IPv4 message including an IPv4 address of said movement assistance apparatus as a destination address; and

transmitting said IPv4 message.

REMARKS

Examination is respectfully requested.

Respectfully submitted,


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